

Original Research

Received 29 June 2026

Revised 28 July 2026

Accepted 11 Aug 2026

Natural Resources for Human
Health 2026, Vol. 6 (16s): 880–897

KEYWORDS:

Healthcare system capability,
Human health, Malaysia private
hospitals, Organisational resources,
Resource-Based View.

Organisational Resources and Healthcare System Capability in Malaysian Private Hospitals: A Resource-Based View

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ABSTRACT: Healthcare system capability (HSC) depends on the effective development and integration of organisational resources. However, evidence on the contribution of these resources remains limited in Malaysian private hospitals. Drawing on the Resource-Based View, this study examines the effects of physical capital resources (PCR), human capital resources (HCR), and organisational capital resources (OCR) on HSC. A cross-sectional survey of 352 management personnel in Malaysian private hospitals was analysed using Partial Least Squares Structural Equation Modelling. The model explained 67.2% of the variance in HSC. PCR ($\beta = 0.21$, $p < 0.001$), HCR ($\beta = 0.26$, $p < 0.001$), and OCR ($\beta = 0.48$, $p < 0.001$) were positively associated with HSC, with OCR showing the strongest association and effect size ($F^2 = 0.27$), followed by HCR ($F^2 = 0.09$) and PCR ($F^2 = 0.06$). The findings indicate that healthcare capability is shaped not only by physical resources but also by human and organisational capacities that facilitate resource integration, knowledge sharing, teamwork, governance, and continuous improvement. The study extends the Resource-Based View to healthcare and highlights organisational capacity as an important resource for strengthening resilient healthcare systems and supporting improved human-health outcomes.

I. INTRODUCTION

The Malaysian private healthcare sector is undergoing substantial transformation driven by rising patient expectations, technological advancement, increasing healthcare expenditure, demographic change, and intensifying competition. Private hospitals are increasingly expected to provide high-quality, patient-centred, efficient, and financially sustainable services while responding to rapid digitalisation. Recent evidence indicates that organisational characteristics, including hospital size and accreditation status, are associated with differences in hospital performance, while digitalisation is increasing demand for integrated information systems and technology-enabled healthcare services [1,2]. These developments suggest that hospital effectiveness depends not only on available resources but also on the capacity to integrate and deploy them effectively.

Healthcare system capability (HSC) therefore extends beyond the possession or adoption of technologies. It reflects an organisation's capacity to deploy, integrate, coordinate, and continuously improve technological, informational, clinical, operational, and managerial resources. Hospital capability is multidimensional, encompassing infrastructure, workforce competencies, organisational strategy, governance, interoperability, data management, and patient-centred processes [3-5]. Similarly, digital-health transformation depends on employee competencies, organisational structures, leadership, data governance, and organisational agility in addition to technological infrastructure [6-8]. Thus, healthcare capability can be viewed as a socio-technical organisational phenomenon arising from the interaction of physical, human, and organisational resources.

The Resource-Based View (RBV) provides an appropriate theoretical foundation for examining this relationship. RBV proposes that valuable organisational resources can generate sustained advantage when they are effectively organised and exploited [9,10]. Importantly, resource possession alone does not guarantee organisational capability; value depends on how resources are combined, coordinated, and deployed. The dynamic capabilities perspective further emphasises the ability of organisations to integrate, build, and reconfigure resources in response to environmental change [11-13]. This perspective is particularly relevant to healthcare, where digitalisation, regulatory requirements, workforce constraints, and changing patient expectations require continuous adaptation. Recent evidence similarly indicates that hospital resilience depends on the interaction between organisational resources and capabilities, including coordination, cooperation, digital technologies, and organisational reconfiguration [14].

Consistent with RBV, this study examines three categories of organisational resources: physical capital resources (PCR), human capital resources (HCR), and organisational capital resources (OCR). PCR include medical equipment, healthcare technologies, information and communication technology systems, facilities, and physical infrastructure. HCR comprise employees' knowledge, skills, experience, expertise, creativity, professional judgement, and decision-making capabilities. OCR encompass organisational culture, teamwork, policies, procedures, routines, governance structures, knowledge sharing, and organisational learning mechanisms. These resources are complementary; physical resources provide the technological and infrastructural foundation for healthcare delivery, human resources provide the expertise required to operate and adapt them, and organisational resources facilitate coordination and integration.

Evidence from Malaysia reinforces the importance of this complementarity. Successful hospital information-system implementation depends not only on technical characteristics but also on user acceptance and organisational conditions [15], while continued healthcare digitalisation is increasing the importance of integrated digital services and organisational readiness [2]. At the same time, differences in organisational characteristics and performance among Malaysian private hospitals suggest that variations in resource configurations and management practices may influence healthcare capability [1].

Despite growing research on healthcare digitalisation, information systems, resilience, and organisational performance, limited empirical evidence explains how distinct categories of organisational resources jointly contribute to HSC, particularly in Malaysian private hospitals. Existing studies have largely examined technology adoption, digital maturity, information-system acceptance, operational efficiency, resilience, or organisational performance as separate outcomes. Although previous research highlights the multidimensional nature of hospital capability and the importance of resources and organisational capabilities [3,14], the relative contributions of physical, human, and organisational resources to HSC remain insufficiently examined.

Addressing this gap is important because RBV suggests that resources create value through their effective organisation, combination, and deployment rather than through possession alone [9,10]. In hospitals, advanced technologies may have limited value when employees lack the competencies to use them or when organisational processes, governance, and knowledge-sharing mechanisms are inadequate. Examining PCR, HCR, and OCR simultaneously therefore provides a more comprehensive explanation of how organisational resources contribute to HSC.

Accordingly, this study investigates the relationships between PCR, HCR, OCR, and HSC among Malaysian private hospitals. HSC is conceptualised as the organisational capacity to establish and integrate effective healthcare processes, standard operating procedures, information-management practices, patient-feedback mechanisms, continuous improvement, and cross-functional coordination. The study makes three contributions. First, it extends RBV to a complex, knowledge-intensive healthcare setting by examining the contribution of distinct resource categories to capability development. Second, it conceptualises HSC as an organisational capability extending beyond technology adoption or digital maturity. Third, it provides context-specific evidence from Malaysian private hospitals undergoing digital and organisational transformation.

Overall, the study advances the proposition that effective healthcare capability depends not simply on resource accumulation but on the capacity to integrate and mobilise physical, human, and organisational resources. Understanding these relationships can inform resource allocation, workforce development, organisational design, governance, and technology investment to support efficient, resilient, and sustainable healthcare delivery and, ultimately, human health.

II. THEORETICAL FOUNDATION OF THE RESEARCH VARIABLES

A. Theoretical Foundation of the Research Variables

Physical capital resources (PCR) comprise the tangible and technology-enabled assets hospitals own, control, and deploy, including medical equipment, facilities, ICT infrastructure, electronic medical records, hospital information systems, digital platforms, and diagnostic technologies. From the Resource-Based View (RBV), these resources provide the infrastructure through which organisations perform activities and develop capabilities; however, their value depends on how effectively they are integrated and deployed with other organisational resources and processes [3, 9,10].

In healthcare, physical and digital resources support information availability, clinical and managerial decision-making, communication, and coordination. Their contribution to healthcare system capability (HSC), however, depends on interoperability, governance, workforce competencies, and integration into clinical and administrative workflows. Hospital digital-maturity research demonstrates that technological capability is closely interconnected with organisational strategy, governance, workforce skills, patient-centred processes, and data analytics [3]. Similarly, digital technologies can strengthen healthcare management and administrative processes when supported by appropriate organisational and employee capabilities [4,7].

Evidence from hospital resilience research further supports this resource–capability relationship. Study by Carbonara et al. [14] shows that digital technologies contribute to hospital resilience when combined with organisational capabilities that enable coordination, adaptation, and resource reconfiguration. More recent evidence indicates that ICT resources and information-integration capabilities can positively contribute to hospital-level resilience, although their effects may depend on operational conditions [16]. Thus, physical and technological resources should be viewed as enabling inputs whose contribution to HSC is realised through effective organisational deployment rather than through acquisition alone.

This relationship is particularly relevant in Malaysian private hospitals, where healthcare digitalisation and technology-enabled services are expanding [2]. Malaysian evidence also indicates that hospital information-system implementation depends on user acceptance and organisational conditions in addition to technical characteristics [15]. Accordingly, stronger PCR are expected to provide a more effective technological and infrastructural foundation for information management, operational coordination, clinical decision-making, and integrated healthcare processes, thereby strengthening HSC.

H1: Physical capital resources are positively associated with healthcare system capability among Malaysian private hospitals.

B. Human Capital Resources and Healthcare System Capability

Human capital resources (HCR) comprise employees' knowledge, skills, expertise, experience, creativity, professional judgement, problem-solving, and decision-making capabilities. They are particularly important in healthcare because service delivery is knowledge-intensive and requires professional expertise and adaptation to complex patient and operational needs. From the Resource-Based View (RBV), human capital represents an important organisational resource because employee knowledge and experience develop through education, professional practice, learning, and organisational interaction and are embedded within organisational contexts [9,10].

HCR contribute to healthcare system capability (HSC) by enabling employees to effectively deploy, adapt, and integrate physical and technological resources. This is increasingly important with healthcare digitalisation, where healthcare professionals and managers must understand, operate, evaluate, and improve digital technologies and associated processes. Research identifies workforce skills and talent as important dimensions of hospital digital maturity and digital capability [3,4]. Mauro et al. [7] further demonstrate that the organisational value of digital technologies depends substantially on employees' competencies to use and apply them effectively.

Human capital can strengthen HSC through technology utilisation, knowledge sharing, cross-functional coordination, problem solving, innovation, and continuous improvement. Healthcare transformation also requires alignment between technology, professional practices, and organisational processes, reinforcing the importance of employee participation and adaptive capabilities [8,17]. Recent evidence further suggests that digital skills can contribute to hospital resilience alongside ICT resources and information-integration capabilities [16].

In Malaysian private hospitals, employees with stronger knowledge, skills, and experience are expected to be better positioned to utilise technologies, manage information, coordinate activities, resolve operational challenges, and support continuous improvement. Thus, HCR provide a knowledge-based foundation through which organisational resources can be transformed into HSC.

H2: Human capital resources are positively associated with healthcare system capability among Malaysian private hospitals

C. Organisational Capital Resources and Healthcare System Capability

Organisational capital resources (OCR) comprise organisational structures, culture, policies, procedures, routines, communication systems, teamwork arrangements, knowledge-management mechanisms, governance practices, and institutionalised knowledge that facilitate coordination. From the RBV perspective, OCR provide the organisational architecture through which physical and human resources are combined and converted into collective capabilities [9,10].

OCR are particularly important in healthcare because effective service delivery requires coordination across professional groups, departments, technologies, and organisational functions. Organisational structures, governance, routines, and communication mechanisms enable hospitals to align technology with clinical processes, coordinate employees, manage information, and institutionalise learning. Consistent with this view, study identified governance, management, organisational strategy, interoperability, and workforce capabilities as interconnected dimensions of hospital digital maturity [3]. Similarly, Carbonara et al. [14] highlight coordination, collaboration, organisational adaptation, and role reconfiguration as important capabilities for hospital resilience.

Organisational culture, procedures, and knowledge-sharing mechanisms can further support technology acceptance, collaboration, organisational learning, and continuous improvement. Standardised procedures promote consistency, governance clarifies responsibilities, and communication and teamwork facilitate cross-functional coordination. Such mechanisms allow individual expertise and technological resources to become embedded in repeatable organisational processes. Evidence indicates that organisational structures and processes are important for realising the benefits of digital-health transformation [6], while digital transformation increasingly requires new roles, practices, regulations, and coordination mechanisms [17].

The Malaysian context further supports the relevance of OCR. Hospital information-system implementation depends not only on technical characteristics but also on user acceptance and organisational conditions [15], while healthcare digitalisation is influenced by organisational structures, governance, and policy conditions [2]. These findings support the RBV proposition that the value of technological and human resources depends partly on the organisational context in which they are deployed.

Accordingly, stronger OCR should enhance hospitals' ability to coordinate resources, standardise processes, facilitate knowledge exchange, support organisational learning, govern technology implementation, and institutionalise continuous improvement. OCR therefore provide an organisational foundation for integrating complementary resources into HSC.

H3: Organisational capital resources are positively associated with healthcare system capability among Malaysian private hospitals.

III. THEORETICAL SYNTHESIS AND CONCEPTUAL FRAMEWORK

Drawing on the Resource-Based View (RBV), this study conceptualises healthcare system capability (HSC) as an organisational capability arising from the effective mobilisation, integration, and coordination of organisational resources. Resources represent assets and inputs available to an organisation, whereas capabilities reflect its capacity to deploy and combine these resources effectively [9,10]. Accordingly, resource possession alone does not ensure strong HSC; capability emerges when resources are embedded in effective organisational processes and practices.

The framework identifies three complementary resource dimensions: physical capital resources (PCR), human capital resources (HCR), and organisational capital resources (OCR). PCR provide the physical and technological foundation for healthcare delivery, including medical equipment, facilities, ICT infrastructure, electronic medical records, and digital systems. Their contribution to HSC depends on effective integration into clinical and administrative processes, consistent with evidence that hospital capability encompasses technological infrastructure alongside interoperability, governance, organisational strategy, workforce skills, and data analytics [3].

HCR represent the knowledge-based dimension of the resource base, encompassing employees' professional expertise, technical skills, experience, creativity, problem-solving, and decision-making capabilities. Healthcare is knowledge-intensive, and employees are central to interpreting information, operating technologies, resolving operational challenges, and adapting healthcare processes. Evidence indicates that workforce skills and competencies are important for converting technological investments into organisational value [4,7]. HCR are therefore expected to provide the knowledge and expertise required to utilise and improve physical and technological resources.

OCR represent the structural and relational dimension of the resource base, including organisational culture, policies, procedures, routines, governance, teamwork, communication, knowledge sharing, and organisational learning. These resources provide the mechanisms through which physical and human resources are coordinated and embedded in organisational processes. Research similarly identifies governance, coordination, collaboration, organisational strategy, and organisational reconfiguration as important dimensions of hospital capability and resilience [3,14].

The three resource dimensions are modelled as distinct but complementary antecedents of HSC rather than sequential stages. PCR provide infrastructure and technology, HCR provide the expertise to utilise and adapt these resources, and OCR provide the structures and routines that enable their coordination and integration. This resource–capability logic is consistent with RBV, which emphasises that organisational value depends on how resources are configured and deployed rather than merely possessed [9,10]. It also aligns with the dynamic capability perspective, which emphasises the integration and reconfiguration of resources in response to environmental change [12].

Healthcare evidence supports this integrated perspective. Hospital digital maturity and resilience depend on interconnected technological, human, organisational, and governance dimensions rather than on technology alone [3,14]. Recent evidence further indicates that ICT resources and digital skills contribute to hospital-level outcomes when supported by information-integration capabilities and appropriate organisational conditions [16]. Thus, the effectiveness of one resource domain may depend on the availability and effective mobilisation of complementary resources.

This framework is particularly relevant to Malaysian private hospitals, which face increasing digitalisation, competitive pressures, changing patient expectations, and demands for efficient and integrated healthcare delivery. Malaysian evidence indicates that hospital information-system implementation depends on technological, organisational, and user-related conditions [15], while continuing digital-health development is increasing the importance of organisational readiness and integration [2]. These conditions provide an appropriate context for examining how different resource categories contribute to HSC.

Accordingly, the conceptual model specifies PCR, HCR, and OCR as exogenous constructs and HSC as the endogenous construct, with direct paths from each resource category to HSC. The model tests their independent statistical associations and does not assume mediation or interaction among the resource dimensions. This parsimonious specification provides an empirical test of whether physical, human, and organisational resources independently contribute to healthcare system capability in Malaysian private hospitals.

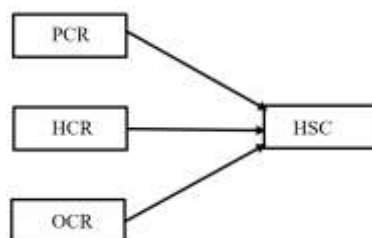


Fig.1 Conceptual model

The conceptual model consists of three independent variables and one dependent variable with three direct relationships:

H1: Physical capital resources are positively associated with healthcare system capability among Malaysian private hospitals.

H2: Human capital resources are positively associated with healthcare system capability among Malaysian private hospitals.

H3: Organisational capital resources are positively associated with healthcare system capability among Malaysian private hospitals.

The framework conceptualises healthcare system capability (HSC) as an organisational capability distinct from the resources that underpin it. Drawing on the Resource-Based View (RBV), physical capital resources (PCR) provide the technological and infrastructural foundation, human capital resources (HCR) provide the knowledge and competencies required for resource utilisation and adaptation, and organisational capital resources (OCR) provide the structures, routines, governance, and learning mechanisms that coordinate and integrate these resources [9,10]. Thus, HSC reflects the organisational capacity to mobilise and integrate complementary resources rather than resource possession alone.

This perspective aligns with evidence that contemporary hospital capability is multidimensional, encompassing technology, people, information, governance, organisational processes, coordination, and continuous improvement [3,14]. Accordingly, PCR, HCR, and OCR are conceptualised as distinct but complementary antecedents of HSC, each contributing a different functional dimension to capability development. The framework therefore provides a parsimonious basis for testing H1–H3 and examining the independent associations of physical, human, and organisational resources with HSC in Malaysian private hospitals.

IV. RESEARCH METHODOLOGY

A. Research Design and Setting

A quantitative cross-sectional design was employed to examine the associations between physical capital resources (PCR), human capital resources (HCR), organisational capital resources (OCR), and healthcare system capability (HSC) in Malaysian private hospitals. The study was grounded in the Resource-Based View (RBV) and analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM), given the model's focus on explaining and predicting HSC through multiple latent constructs [9,18,19,20].

Malaysia's private hospital sector was selected because of its increasing digitalisation, technological intensity, competitive pressures, and growing demand for efficient, integrated, and patient-responsive healthcare services [1,2].

B. Population, Sampling and Sample

The target population comprised managerial personnel employed in Malaysian private hospitals. Eligible respondents were executives, managers, supervisors, or equivalent administrative personnel who had sufficient knowledge of hospital operations and resource management.

Purposive sampling was employed because respondents were required to possess relevant organisational knowledge. Inclusion criteria were employment in a registered Malaysian private hospital, a managerial or equivalent position, at least one year of organisational experience, and involvement in resource allocation, operational management, organisational decision-making, or healthcare-system implementation.

A total of 352 valid questionnaires were obtained and retained for analysis. An a priori power analysis was conducted for three predictors of HSC at $\alpha = .05$ and statistical power of .80. The resulting minimum sample requirement was below the achieved sample, indicating adequate statistical power for the proposed structural model [19,20].

C. Instrument and Measures

Data were collected using a structured questionnaire comprising demographic and organisational information and measures of PCR, HCR, OCR, and HSC. All substantive constructs were assessed using five-point Likert-type scales.

PCR was measured with 10 items covering medical equipment, facilities, ICT infrastructure, digital systems, and related technological resources. HCR comprised 12 items assessing employee knowledge, professional competence, skills, experience, creativity, innovation, problem-solving, learning, and decision-making. OCR comprised 12 items assessing organisational culture, teamwork, policies and procedures, knowledge sharing, organisational learning, communication, training, and organisational support. HSC was measured using 10 reflective items covering process standardisation, standard operating procedures, continuous improvement, patient feedback, information management, coordination, operational efficiency, employee participation, and responsiveness to changing healthcare requirements.

PCR, HCR, OCR, and HSC were specified as reflective constructs. The questionnaire was reviewed through a pilot study involving 80 management personnel to assess clarity, relevance, and comprehensibility. Minor wording revisions were made following the pilot, and pilot responses were excluded from the main analysis.

D. Data Collection and Ethical Procedures

Questionnaires were distributed to eligible respondents following appropriate organisational access procedures. Participation was voluntary, and respondents were informed of the study purpose, confidentiality, anonymity, and their right to decline participation. Questionnaires with substantial missing data or invalid response patterns were excluded.

Ethical requirements applicable to the participating organisations and institution were observed. No personally identifiable information was collected, and findings were reported only in aggregate form.

E. Common Method Bias

Because PCR, HCR, OCR, and HSC were measured from the same respondents using a single instrument, common method bias (CMB) was considered. Procedural remedies included anonymous participation, confidentiality assurances, neutral item wording, and the absence of identifiable information. Statistical assessment was conducted using full-collinearity variance inflation factors (VIF), with values below the recommended threshold interpreted as indicating no substantial CMB concern [21].

F. Measurement Model Assessment

The reflective measurement model was evaluated for indicator reliability, internal consistency reliability, convergent validity, and discriminant validity using established PLS-SEM procedures [19].

Indicator reliability was assessed using outer loadings, with values of approximately 0.70 or higher considered acceptable. Internal consistency was evaluated using Cronbach's alpha and composite reliability (CR), with values ≥ 0.70 indicating satisfactory reliability. Convergent validity was assessed using average variance extracted (AVE), with values ≥ 0.50 considered adequate. Discriminant validity was assessed primarily using the heterotrait–monotrait ratio (HTMT), with values below 0.85 used as the conservative criterion.

The constructs demonstrated satisfactory preliminary internal consistency, with Cronbach's alpha values of 0.859 for PCR, 0.910 for HCR, 0.905 for OCR, and 0.919 for HSC.

G. Structural Model Assessment

After establishing measurement-model adequacy, the structural model was assessed for predictor collinearity, path coefficients (β), coefficient of determination (R^2), effect sizes (f^2), and predictive performance. VIF values were examined to assess collinearity among PCR, HCR, and OCR. R^2 indicated the proportion of variance in HSC explained by the predictors, while f^2 assessed the substantive contribution of each predictor.

Hypotheses were tested using 5,000 bootstrap resamples in SmartPLS 4. Path coefficients, standard errors, t-values, p-values, and bootstrap confidence intervals were examined. A hypothesised relationship was considered supported when the estimated coefficient was positive, statistically significant, and its confidence interval excluded zero. Predictive performance was additionally assessed using PLSpredict, where applicable [19].

The structural model tested:

- H1: PCR are positively associated with HSC.
- H2: HCR are positively associated with HSC.
- H3: OCR are positively associated with HSC.

Because the study employed a cross-sectional design, statistically significant relationships were interpreted as associations rather than evidence of temporal causality.

H. Statistical Software

Data screening and descriptive analyses were conducted using IBM SPSS Statistics 26, while measurement-model and structural-model estimation, bootstrapping, effect-size analysis, and predictive assessment were performed using SmartPLS 4.

V. RESULTS

A. Measurement Model

The measurement model was assessed before testing the structural relationships. Because PCR, HCR, OCR, and HSC were specified as reflective constructs, indicator reliability, internal consistency, convergent validity, and discriminant validity were examined following established PLS-SEM guidelines [19,21].

TABLE 1
CONSTRUCT RELIABILITY AND CONVERGENT VALIDITY

Construct	Items	Cronbach's α	CR	AVE	Assessment
PCR	10	0.859	0.884	0.523	Acceptable
HCR	12	0.910	0.925	0.543	Acceptable
OCR	12	0.905	0.921	0.537	Acceptable
HSC	10	0.919	0.934	0.585	Acceptable

All constructs demonstrated satisfactory internal consistency, with Cronbach's alpha ranging from 0.859 to 0.919 and composite reliability from 0.884 to 0.934, exceeding the 0.70 threshold. AVE values ranged from 0.523 to 0.585, indicating that each construct explained more than 50% of the variance in its indicators. These results establish adequate reliability and convergent validity.

Discriminant validity was initially assessed using the Fornell–Larcker criterion (Table 2). The square root of AVE exceeded the inter-construct correlations for PCR and HCR. However, the correlation between OCR and HSC (0.768) slightly exceeded the square root of AVE for HSC (0.765), indicating a marginal Fornell–Larcker concern. Given the known limitations of this criterion, discriminant validity should therefore be determined primarily from the HTMT results, consistent with contemporary PLS-SEM recommendations [19,22].

TABLE 2
FORNELL–LARCKER CRITERION

Construct	PCR	HCR	OCR	HSC
PCR	0.723			
HCR	0.615	0.737		
OCR	0.648	0.721	0.733	
HSC	0.671	0.694	0.768	0.765

B. Descriptive Statistics and Correlations

Mean scores ranged from 4.05 to 4.13, indicating generally favourable respondent assessments of organisational resources and HSC. All constructs were positively correlated ($p < 0.01$). OCR demonstrated the strongest bivariate association with HSC ($r = 0.768$), followed by HCR ($r = 0.694$) and PCR ($r = 0.671$). These correlations provide preliminary support for the hypothesised relationships but do not establish the unique contribution of each predictor; this was examined through the structural model.

TABLE 3
DESCRIPTIVE STATISTICS AND CORRELATIONS

Construct	Mean	SD	PCR	HCR	OCR	HSC
PCR	4.05	0.61	1			
HCR	4.12	0.57	0.615**	1		
OCR	4.10	0.59	0.648**	0.721**	1	
HSC	4.13	0.61	0.671**	0.694**	0.768**	1

*Note: * $p < 0.01$.

C. Structural Model

The structural model was assessed using predictor collinearity, path coefficients, bootstrap significance testing, effect sizes, explanatory power, and predictive relevance. Bootstrapping was performed using 5,000 resamples. Structural-model collinearity was assessed using the inner variance inflation factor (VIF) values for PCR, HCR, and OCR. Collinearity is an important consideration because substantial overlap among predictors can affect the stability and interpretation of path coefficients. VIF values below 3 are generally regarded as indicating low collinearity, whereas values between 3 and 5 warrant closer examination [19]. The observed VIF values are reported in Table 4.

TABLE 4
DIRECT EFFECTS ON HEALTHCARE SYSTEM CAPABILITY

Hypothesis	Path	β	SE	t	P	f ²	95% CI	Decision
H1	PCR → HSC	0.21	0.06	3.52	<0.001	0.06	[0.092, 0.331]	Supported
H2	HCR → HSC	0.26	0.07	3.71	<0.001	0.09	[0.121, 0.398]	Supported
H3	OCR → HSC	0.48	0.07	6.86	<0.001	0.27	[0.338, 0.612]	Supported

All three hypothesised relationships were positive and statistically significant. PCR was positively associated with HSC ($\beta = 0.21$, $p < 0.001$), supporting H1. HCR also demonstrated a significant positive association with HSC ($\beta = 0.26$, $p < 0.001$), supporting H2. OCR showed the strongest relationship with HSC ($\beta = 0.48$, $p < 0.001$), supporting H3.

The confidence intervals for all three paths excluded zero, further supporting the statistical significance of the relationships. Given the cross-sectional design, these findings indicate significant associations rather than definitive causal effects.

D. Effect Sizes and Explanatory Power

The effect-size analysis indicates that PCR and HCR each made small unique contributions to HSC, whereas OCR demonstrated a medium effect. Thus, the relatively stronger path coefficient for OCR was accompanied by a substantively larger unique contribution to explained variance.

TABLE 5
EXPLANATORY POWER AND EFFECT SIZES

Predictor	f ²	Effect
PCR	0.06	Small
HCR	0.09	Small
OCR	0.27	Medium

PCR, HCR, and OCR collectively explained 67.2% of the variance in HSC ($R^2 = 0.672$; adjusted $R^2 = 0.669$). The small difference between R^2 and adjusted R^2 indicates limited inflation associated with model complexity. This result represents substantial in-sample explanatory power; it should not, however, be interpreted as evidence of out-of-sample predictive accuracy.

TABLE 6
COEFFICIENT OF DETERMINATION

Endogenous construct	R ²	Adjusted R ²
HSC	0.672	0.669

E. Predictive Relevance

The Q^2 value of 0.382 is greater than zero, indicating predictive relevance under the Stone–Geisser criterion. This finding suggests that the model has predictive relevance for HSC. However, Q^2 alone does not establish the magnitude of out-of-sample predictive accuracy; such claims should be supported by PLSpredict or another appropriate predictive assessment.

TABLE 7
COEFFICIENT OF DETERMINATION

Endogenous construct	Q^2	Interpretation
HSC	0.382	Predictive relevance

F. Importance–Performance Map Analysis

The IPMA provides complementary evidence by examining the importance and performance of each resource dimension. OCR showed the highest importance for HSC (total effect = 0.48), followed by HCR (0.26) and PCR (0.21). Performance scores were relatively high across all three dimensions, ranging from 81.0% to 82.4%.

The results indicate that OCR has the greatest statistical importance for HSC, while HCR recorded the highest performance score. Accordingly, the IPMA supports attention to organisational structures, teamwork, knowledge sharing, governance, organisational learning, and process coordination while recognising that all three resource domains contribute to HSC.

TABLE 8
COEFFICIENT OF DETERMINATION

Predictor	Importance (total effect)	Performance (%)
PCR	0.21	81.0
HCR	0.26	82.4
OCR	0.48	82.0

G. Summary of findings

All three hypotheses (H1–H3) were supported. Physical capital resources (PCR), human capital resources (HCR), and organisational capital resources (OCR) were each positively and significantly associated with healthcare system capability (HSC). OCR showed the strongest association ($\beta = 0.48$; $f^2 = 0.27$), followed by HCR ($\beta = 0.26$; $f^2 = 0.09$) and PCR ($\beta = 0.21$; $f^2 = 0.06$). Collectively, the three resource dimensions explained 67.2% of the variance in HSC ($R^2 = 0.672$).

Overall, the findings indicate that HSC is associated with complementary physical, human, and organisational resources, with organisational capital making the strongest unique statistical contribution in the model. This supports the RBV perspective that organisational value depends not only on resource availability but also on how resources are coordinated and deployed through organisational structures and processes. Given the cross-sectional design, the findings indicate associations rather than causal effects.

TABLE 9 SUMMARY OF FINDINGS

Hypothesis	Relationship	β	t	p	95% CI	f^2	Decision
H1	PCR → HSC	.21	3.52	< .001	[.092, .331]	.06	Supported
H2	HCR → HSC	.26	3.71	< .001	[.121, .398]	.09	Supported
H3	OCR → HSC	.48	6.86	< .001	[.338, .612]	.27	Supported

VI. DISCUSSION

A. Overview of Findings

The findings provide empirical support for the proposed resource–capability perspective of healthcare system capability (HSC) in Malaysian private hospitals. Physical capital resources (PCR), human capital resources (HCR), and organisational capital resources (OCR) are each positively associated with HSC, with the structural model explaining 67.2% of its variance ($R^2 = 0.672$; adjusted $R^2 = 0.669$). The results therefore indicate that differences in hospitals' physical, human, and organisational resource bases are associated with differences in their capacity to establish, coordinate, and continuously improve healthcare processes.

The three resource dimensions, however, do not exhibit equivalent effect magnitudes. OCR has the largest estimated association with HSC ($\beta = 0.48$; $f^2 = 0.27$), followed by HCR ($\beta = 0.26$; $f^2 = 0.09$) and PCR ($\beta = 0.21$; $f^2 = 0.06$). This pattern is theoretically relevant because it suggests that healthcare system capability is associated not only with the availability of tangible assets and employee competencies but also with the organisational structures and routines through which these resources are coordinated and embedded in healthcare activities.

B. Theoretical Contribution to the Resource-Based View

The principal theoretical contribution of the study is the empirical distinction between organisational resources and organisational capability in the healthcare context. PCR, HCR, and OCR represent different components of the hospital resource base, whereas HSC represents the organisational capacity to deploy, integrate, coordinate, and continuously improve those resources. This distinction extends the application of RBV beyond a conventional resource–performance relationship by focusing on how resources are associated with capability development.

The findings are consistent with Barney's [9] proposition that the strategic value of resources depends on their effective organisation and utilisation. They also align with subsequent RBV scholarship emphasising resource configuration and organisational processes [10]. The significant relationships across all three resource categories indicate that physical, human, and organisational resources each constitute relevant components of the resource base associated with HSC. At the same time, the larger association observed for OCR suggests that organisational mechanisms may have a comparatively greater role in connecting resource availability with system-level capability.

This interpretation also complements the dynamic-capabilities perspective, which emphasises organisational processes through which resources and competencies are integrated and reconfigured in changing environments [12]. In hospitals, such processes are particularly relevant because healthcare delivery requires the simultaneous coordination of technologies, professional expertise, information, facilities, procedures, and patient requirements. The findings therefore support a view of HSC as an organisational capability rather than as a proxy for technology ownership or adoption.

This distinction is particularly relevant to the digital transformation of healthcare. Research indicates that hospital digital capability encompasses organisational strategy, workforce capability, governance, interoperability, and organisational readiness alongside technological infrastructure [3-5]. The present findings extend this perspective by empirically examining physical, human, and organisational resources simultaneously within Malaysian private hospitals.

C. Physical Capital Resources and Healthcare System Capability

The positive association between PCR and HSC supports the proposition that physical and technology-enabled resources constitute an important foundation for healthcare capability. Medical equipment, ICT infrastructure, digital systems, hospital facilities, diagnostic technologies, and information systems provide the infrastructure required for clinical activities, information management, communication, and operational coordination.

The relatively small effect size, however, provides an important qualification. Although PCR is significantly associated with HSC, its unique contribution is smaller than those of HCR and particularly OCR. This finding suggests that the presence of physical and technological resources alone provides an incomplete explanation of differences in healthcare system capability. This interpretation is consistent with research showing that hospital digital maturity extends beyond technology to encompass organisational strategy, governance, interoperability, people and skills, and patient-centred processes [3,5].

The finding is also consistent with Gardner et al. [4] and Mauro et al. [7], who emphasise the importance of organisational conditions and employee competencies in converting digital investments into organisational value. In the Malaysian context, where digital healthcare adoption continues to expand [2], the result suggests that the organisational value of technology is closely associated with the conditions under which it is implemented and used.

D. Human Capital Resources and Healthcare System Capability

The positive association between HCR and HSC demonstrates the relevance of employee knowledge, expertise, experience, creativity, problem-solving capability, and decision-making capacity to healthcare system capability. This finding reinforces the RBV proposition that knowledge-based resources constitute an important organisational resource [9].

The finding is consistent with healthcare research identifying workforce skills and competencies as important conditions for digital and organisational transformation [4,7]. Healthcare professionals do more than operate technologies; they interpret information, exercise professional judgement, resolve operational problems, communicate across functional boundaries, and contribute to process improvement. Human capital therefore provides an important knowledge base through which hospitals can utilise and adapt their physical and technological resources.

Nevertheless, the smaller effect associated with HCR relative to OCR suggests that individual competencies do not necessarily translate directly into system-level capability. Their organisational value may depend on mechanisms that enable knowledge to be shared, coordinated, institutionalised, and incorporated into organisational routines. This interpretation is consistent with the holistic perspective advanced by Frisinger and Papachristou [8], which emphasises alignment among technology, healthcare professionals, and organisational processes.

E. Organisational Capital Resources and Healthcare System Capability

OCR demonstrates the largest estimated association with HSC and the largest effect size among the three resource dimensions. This result indicates that organisational capital has the strongest unique statistical association with HSC within the estimated model. Organisational culture, teamwork, policies and procedures, knowledge sharing, communication, organisational learning, governance, and established routines constitute mechanisms through which hospitals coordinate and institutionalise the use of other resources.

This finding is consistent with the capability logic of Teece et al. [12], whereby organisational processes facilitate the integration and coordination of resources and competencies. It also corresponds with RBV-based research on hospital resilience, which highlights coordination, collaboration, organisational reconfiguration, and integration as important organisational capabilities [14].

The finding is particularly relevant to healthcare because hospital activities are highly interdependent. Effective service delivery frequently requires coordination among clinical professionals, diagnostic and pharmacy services, administrative units, ICT personnel, and management. Consequently, the contribution of individual resources depends partly on organisational mechanisms that connect people, information, technology, and processes.

The result also complements evidence that successful healthcare transformation requires organisational vision, agility, governance, workforce engagement, and appropriate organisational processes in addition to technological infrastructure [4,8]. Thus, the relatively larger association of OCR with HSC highlights the empirical relevance of organisational integration within the resource–capability relationship.

F. Complementarity of the Three Resource Dimensions

An important implication of the findings is that PCR, HCR, and OCR should be understood as complementary rather than interchangeable resource dimensions. PCR provides the technological and physical foundation for healthcare operations, HCR provides the knowledge and expertise required to use and adapt that foundation, and OCR provides structures and routines through which physical and human resources can be coordinated.

The statistical pattern supports this conceptual distinction. PCR and HCR remain significantly associated with HSC after OCR is included in the model, while OCR demonstrates the largest estimated association. The results therefore do not suggest that organisational capital replaces physical or human resources. Rather, they indicate that each resource category has a distinct association with HSC and that organisational capital has the largest unique association within the estimated model.

This interpretation is consistent with the resource-orchestration logic underlying RBV and with healthcare research emphasising the interaction among technology, people, governance, information, and organisational processes [3,14]. The findings consequently support a more integrated explanation of healthcare capability in which technological assets, workforce competencies, and organisational systems collectively form the resource foundation for hospital capability.

G. Implications for Malaysian Private Hospitals

The findings have several implications for hospital management. First, the results indicate that investment in physical and digital infrastructure should be considered alongside workforce and organisational development. Technology acquisition alone may not be sufficient to strengthen HSC if employees lack the necessary competencies or if organisational processes do not support effective implementation.

Second, the positive association between HCR and HSC highlights the relevance of workforce development, particularly training, professional knowledge, problem-solving, digital competencies, and opportunities for organisational learning. Such initiatives may be more effective when embedded within broader organisational mechanisms for knowledge sharing and cross-functional collaboration.

Third, the relatively larger association between OCR and HSC draws attention to organisational mechanisms such as teamwork, communication, governance, standardised procedures, knowledge sharing, organisational learning, and continuous improvement. These mechanisms provide the context within which physical and human resources can be coordinated and utilised.

These implications should nevertheless be interpreted as evidence-informed areas for managerial consideration rather than as causal prescriptions. Because the study is cross-sectional, the observed relationships do not establish that changes in a particular resource dimension would necessarily produce corresponding changes in HSC.

H. Contribution to Healthcare Resource and Capability Research

Overall, the study contributes to healthcare management research by demonstrating that HSC is associated with multiple dimensions of the organisational resource base and by identifying differences in the magnitude of these associations. The findings extend technology-centred perspectives of healthcare transformation by demonstrating the relevance of human and organisational resources alongside physical and digital infrastructure.

The results also provide context-specific evidence from Malaysian private hospitals, where digitalisation, competitive pressures, changing patient expectations, and operational requirements are simultaneously shaping organisational capability [1,2]. More broadly, the findings support a resource–capability interpretation in which healthcare organisations' ability to integrate and deploy resources is an important dimension of organisational capability.

Importantly, the findings should be interpreted as statistical associations rather than evidence of causal mechanisms. Future research using longitudinal, multi-source, or multi-level designs could examine how changes in organisational resources contribute to the development of HSC over time and whether the resource dimensions interact or complement one another in producing healthcare outcomes.

I. Importance of the Three Resource Dimensions

The ordering of the estimated path coefficients—OCR, HCR, and PCR—provides a more nuanced understanding of the resource–capability relationship than would be obtained by examining technology, employees, or organisational systems independently. Physical capital resources provide the material and technological foundation for healthcare delivery; human capital resources provide the knowledge, competencies, and professional expertise required to utilise and adapt those resources; and organisational capital resources provide the structures, routines, governance mechanisms, and coordination processes through which these resources can be integrated into collective organisational practices.

The findings therefore suggest that the development of HSC is better understood as a resource-integration process than simply as a process of resource accumulation. This interpretation is consistent with hospital resilience research, which emphasises the synergistic relationship between organisational resources and capabilities and the importance of coordination, collaboration, and organisational reconfiguration in converting resources into organisational responses [14].

J. Theoretical Implications

The study generates three principal theoretical implications. Firstly, the findings extend the application of the Resource-Based View to the healthcare capability domain. The results demonstrate that physical, human, and organisational resources are each significantly associated with healthcare system capability. This extends a conventional resource–performance perspective by positioning capability formation as an important organisational phenomenon through which resources can contribute to healthcare-system outcomes. Rather than conceptualising resources and capability as interchangeable constructs, the study distinguishes the resource base from the organisational ability to deploy and integrate that resource base.

Secondly, the findings strengthen a resource-orchestration interpretation of the RBV. The relatively larger coefficient and effect size associated with OCR indicate that organisational structures and processes have a stronger unique statistical association with HSC than PCR and HCR within the estimated model. Organisational routines, teamwork, policies and procedures, knowledge-sharing mechanisms, governance, communication, and organisational learning may therefore play an important role in enabling hospitals to coordinate and embed physical and human resources within healthcare processes. The finding supports a shift in emphasis from resource possession towards resource deployment, integration, and orchestration.

Thirdly, the findings provide evidence against a technology-centred interpretation of healthcare transformation. Although PCR has a statistically significant positive relationship with HSC, its effect size is smaller than those of HCR and OCR. This indicates that technological and physical resources, while important, do not appear to be sufficient on their own to account for variation in healthcare system capability. Contemporary healthcare transformation requires technological infrastructure to be accompanied by workforce competencies and organisational mechanisms that enable technology to become embedded in healthcare practice. This interpretation is consistent with research showing that healthcare digital capability involves organisational vision, agility, technical capability, workforce skills, and organisational readiness rather than technology alone [4,5,7].

K. Practical and Managerial Implications

The findings have several implications for managers of Malaysian private hospitals. Firstly, investment in technology and physical infrastructure should be accompanied by organisational integration. Hospitals may benefit from evaluating digital and physical investments not only according to their acquisition or availability but also according to the extent to which they are integrated into clinical workflows, information systems, decision-making processes, communication mechanisms, and continuous-improvement activities.

Secondly, human capital development should extend beyond technical training. Professional development programmes can incorporate digital literacy, data interpretation, problem-solving, interdisciplinary collaboration, innovation, and process-improvement competencies. Such development can strengthen employees' ability to use available technologies and participate effectively in organisational improvement activities.

Thirdly, the findings indicate that organisational capital warrants particular managerial attention. Because OCR demonstrated the largest estimated path coefficient and effect size, hospital managers may benefit from strengthening organisational routines, cross-functional teamwork, knowledge sharing, governance, communication, standardisation, organisational learning, and continuous improvement. These organisational mechanisms can provide the infrastructure through which physical and human resources are coordinated and translated into collective healthcare practices.

Fourth, the IPMA findings provide an additional perspective on managerial priorities. OCR recorded the highest importance score (0.48) while also demonstrating a relatively high-performance score (82.0%). This should not be interpreted as evidence that OCR represents the largest performance deficit. Rather, the combination of relatively high importance and high performance suggests that existing organisational mechanisms are potentially valuable assets that should be maintained, institutionalised, and continuously improved. Similarly, HCR recorded the highest performance score (82.4%), while PCR recorded a performance score of 81.0%. These findings illustrate that importance and performance represent distinct managerial dimensions and should therefore be interpreted separately.

L. Contribution to the Malaysian Private Healthcare Context

The study provides context-specific evidence concerning the relationship between organisational resources and healthcare system capability in Malaysian private hospitals. Malaysia's healthcare sector has experienced increasing digitalisation, with

evidence indicating substantial adoption of digital solutions and new healthcare delivery models within the private sector [2]. However, the present findings indicate that technological adoption should not be treated as synonymous with healthcare system capability.

The results suggest that physical and technological resources are most meaningfully understood within a broader organisational configuration involving employee competencies and organisational systems. This is particularly relevant as healthcare delivery becomes increasingly dependent on the integration of information systems, clinical processes, managerial processes, professional expertise, and patient-centred practices.

The study therefore contributes empirical support for a holistic conception of healthcare system capability in which technology, people, and organisational systems represent complementary dimensions of the hospital resource base. This interpretation is also consistent with Malaysian evidence indicating that successful hospital information-system implementation depends on organisational and user-related conditions in addition to technical characteristics.

Contribution Statements

Theoretically, this study extends the Resource-Based View by demonstrating that healthcare system capability is conceptually distinct from the organisational resources from which it develops. Physical, human, and organisational resources represent different components of the hospital resource base, whereas HSC represents the hospital's ability to deploy, coordinate, integrate, and continuously improve those resources through healthcare processes. The findings therefore support a resource–capability interpretation in which organisational value depends not merely on resource possession but also on the mechanisms through which resources are mobilised and integrated.

Empirically, the study provides evidence from Malaysian private hospitals, a context that remains comparatively underexamined in research examining the relationship between organisational resources and integrated healthcare-system capability. The structural model explains 67.2% of the variance in HSC, while all three hypothesised relationships are statistically significant and positive. The findings therefore provide evidence that PCR, HCR, and OCR represent distinct but complementary predictors of healthcare system capability within the study context.

From a managerial perspective, the findings indicate that hospitals may benefit from moving beyond a predominantly technology-investment orientation towards a broader resource-integration perspective. Physical infrastructure and digital technologies remain important, but their contribution to healthcare system capability appears to depend partly on employee competencies and organisational mechanisms that coordinate and embed those resources within healthcare processes. The relatively larger effect associated with OCR highlights the potential importance of organisational routines, teamwork, knowledge sharing, governance, standardisation, organisational learning, and continuous improvement.

The central contribution of the study is therefore not simply that organisational resources matter, but that the organisational architecture through which resources are coordinated and integrated demonstrates the strongest statistical association with HSC in the estimated model. This provides a theoretically grounded explanation for why hospitals with access to comparable technologies and professional resources may nevertheless differ in their capacity to establish, coordinate, and continuously improve healthcare-system processes.

VII. CONCLUSION

This study examined how physical capital resources (PCR), human capital resources (HCR), and organisational capital resources (OCR) are associated with healthcare system capability (HSC) among Malaysian private hospitals through the lens of the Resource-Based View (RBV). The findings provide consistent empirical support for the proposed relationships: PCR ($\beta = 0.21$, $p < .001$), HCR ($\beta = 0.26$, $p < .001$), and OCR ($\beta = 0.48$, $p < .001$) were all positively and significantly associated with HSC. Collectively, the three resource dimensions explained 67.2% of the variance in HSC (adjusted $R^2 = 0.669$), indicating substantial explanatory power within the sampled context. However, these results should be interpreted as evidence of association rather than causal effects, given the cross-sectional design.

A particularly important finding is the unequal contribution of the three resource dimensions. OCR demonstrated the largest estimated coefficient and effect size ($f^2 = 0.27$), compared with HCR ($f^2 = 0.09$) and PCR ($f^2 = 0.06$). This pattern suggests that resources do not translate into healthcare capability simply through their availability. Rather, their contribution appears to depend substantially on the organisational structures and routines through which they are coordinated and embedded in

healthcare processes. Organisational culture, governance, communication, teamwork, knowledge sharing, standardisation, organisational learning, and continuous-improvement routines may therefore represent important mechanisms through which physical and human resources become organisationally usable. This interpretation is consistent with the RBV and extends its resource logic towards a capability-oriented perspective in which value depends not only on possessing resources but also on integrating and deploying them through organisational processes.

The findings consequently qualify a resource-centred interpretation of healthcare capability. PCR was positively associated with HSC, confirming the relevance of medical equipment, digital infrastructure, information systems, diagnostic technologies, and physical facilities. Nevertheless, its relatively small unique effect indicates that technological or infrastructural investment, in isolation, does not fully account for differences in HSC. Similarly, HCR was positively associated with HSC, demonstrating the relevance of professional knowledge, expertise, experience, problem-solving, innovation, and decision-making capabilities. Yet the comparatively smaller effect of HCR suggests that individual-level competencies may require organisational mechanisms that facilitate knowledge exchange, collaboration, coordination, and learning before they can be translated into broader system-level capability. Thus, the findings point towards complementarity among resources rather than a simple substitution relationship between technology, people, and organisational systems.

The prominence of OCR is theoretically significant because it shifts attention from the possession of resources towards the organisational conditions under which resources are combined. HSC, as conceptualised in this study, involves the ability to establish, integrate, coordinate, standardise, and continuously improve healthcare processes. These activities are inherently organisational and cannot be explained adequately by physical assets or individual competencies alone. The results therefore support a resource-integration interpretation of RBV in which organisational capital provides mechanisms for combining heterogeneous resources into repeatable and potentially scalable processes. In this respect, the study contributes to healthcare management research by conceptualising HSC as an organisational capability rather than simply as a consequence of technology adoption or resource availability.

The IPMA findings provide a complementary interpretation. OCR recorded the highest importance score (0.48) alongside a relatively high-performance score (82.0%). Rather than indicating a straightforward performance deficit, this combination suggests that organisational capital represents a strategically consequential capability domain that warrants continued maintenance and development. For hospital managers, the implication is not that investments in physical or human resources should be displaced by organisational initiatives. Rather, the findings suggest that the returns from such investments may depend partly on the organisational arrangements through which technology, expertise, information, and routines are integrated. Accordingly, technology acquisition, workforce development, governance, knowledge management, standard operating procedures, teamwork, and continuous improvement should be considered as interconnected components of capability development.

At the same time, the magnitude of the reported relationships should not be interpreted as establishing that OCR independently causes higher HSC. The cross-sectional design prevents temporal ordering from being established, while the use of self-reported organisational data creates the possibility of perceptual and common-method influences. Although procedural and statistical remedies may reduce these concerns, they cannot eliminate them entirely. In addition, the study's focus on Malaysian private hospitals establishes an important contextual boundary. Institutional arrangements, ownership structures, regulatory environments, resource constraints, and organisational practices may differ across public hospitals, other healthcare organisations, and national settings. The substantial R^2 should therefore be understood as sample- and model-specific explanatory power rather than evidence that the three resource dimensions comprehensively explain healthcare system capability.

These limitations also identify several avenues for further research. Longitudinal designs could establish temporal relationships between resource development and capability formation, while objective indicators could complement perceptual measures of organisational resources and HSC. Comparative research across public and private hospitals and across national healthcare systems could establish whether the observed pattern of relationships is context-specific or more broadly applicable. Future studies could also investigate the mechanisms underlying resource integration by examining organisational learning, digital maturity, innovation capability, organisational agility, and resource orchestration as mediators or moderators. Importantly, subsequent research should examine whether HSC translates into downstream outcomes, including service quality, patient experience, operational efficiency, resilience, innovation, financial performance, and competitive outcomes. Such research

would help establish whether the capability identified in this study represents an intermediate organisational mechanism through which resources ultimately generate healthcare and organisational value.

Overall, the evidence supports a view of HSC as an emergent organisational capability arising from the interaction of physical, human, and organisational resources. PCR provides infrastructural and technological foundations; HCR provides the knowledge and competencies necessary to utilise, adapt, and improve those resources; and OCR provides the organisational structures and routines through which the resources can be coordinated and integrated. The central implication is therefore not that one resource category can independently explain healthcare capability, but that capability is associated with the organisational integration of heterogeneous resources. For Malaysian private hospitals, the findings reinforce the importance of moving beyond a resource-acquisition logic towards a resource-integration and capability-building logic. Such a perspective provides a stronger theoretical basis for understanding how hospitals can convert resource endowments into coordinated, standardised, learning-oriented, and continuously improving healthcare processes, while recognising that the causal and generalisability claims of the present study remain appropriately bounded by its design and context.

ACKNOWLEDGEMENT

The authors acknowledged the support of the department of business administration, Open University Malaysia for providing supporting letters for data collection from private hospitals in Malaysia.

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